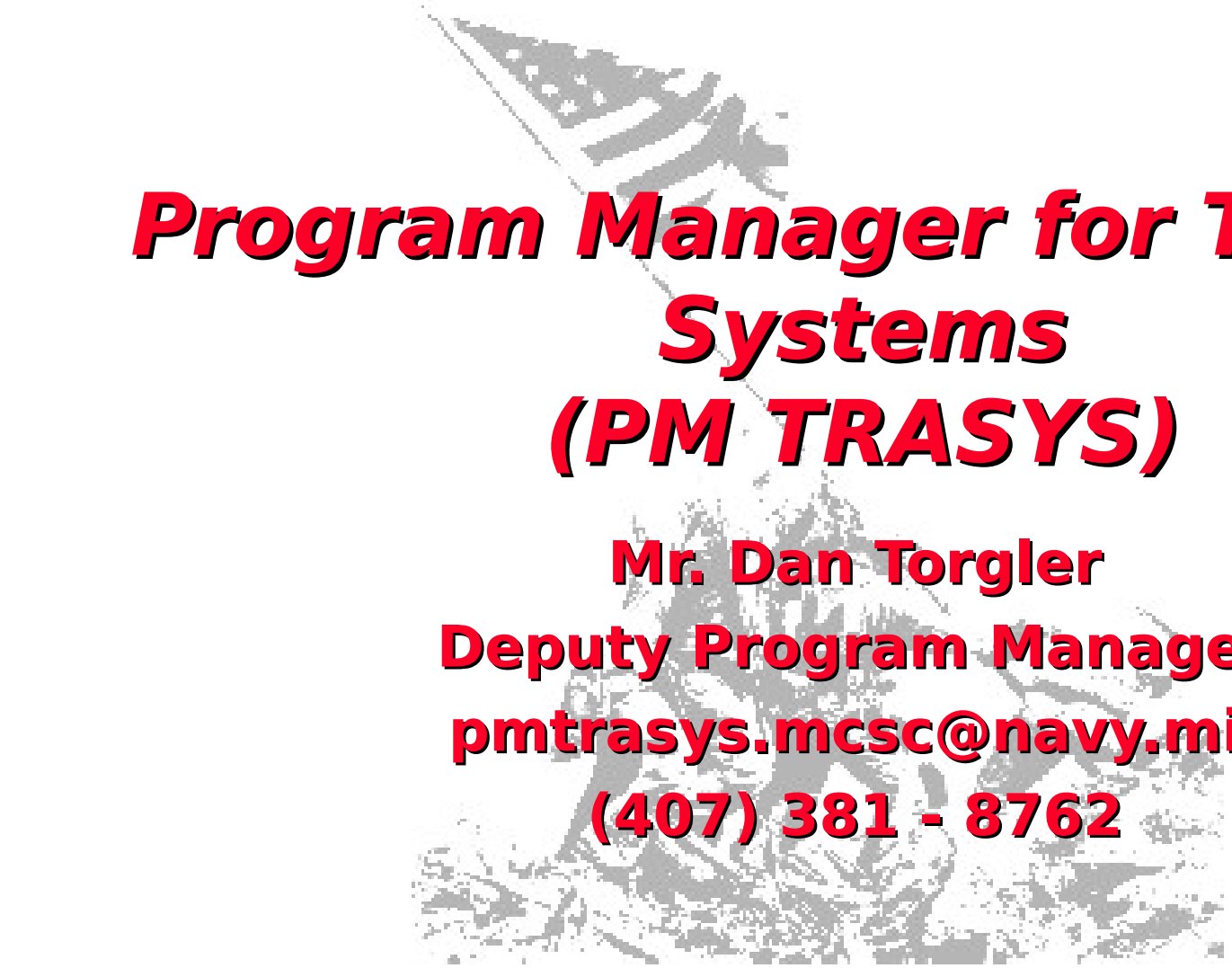
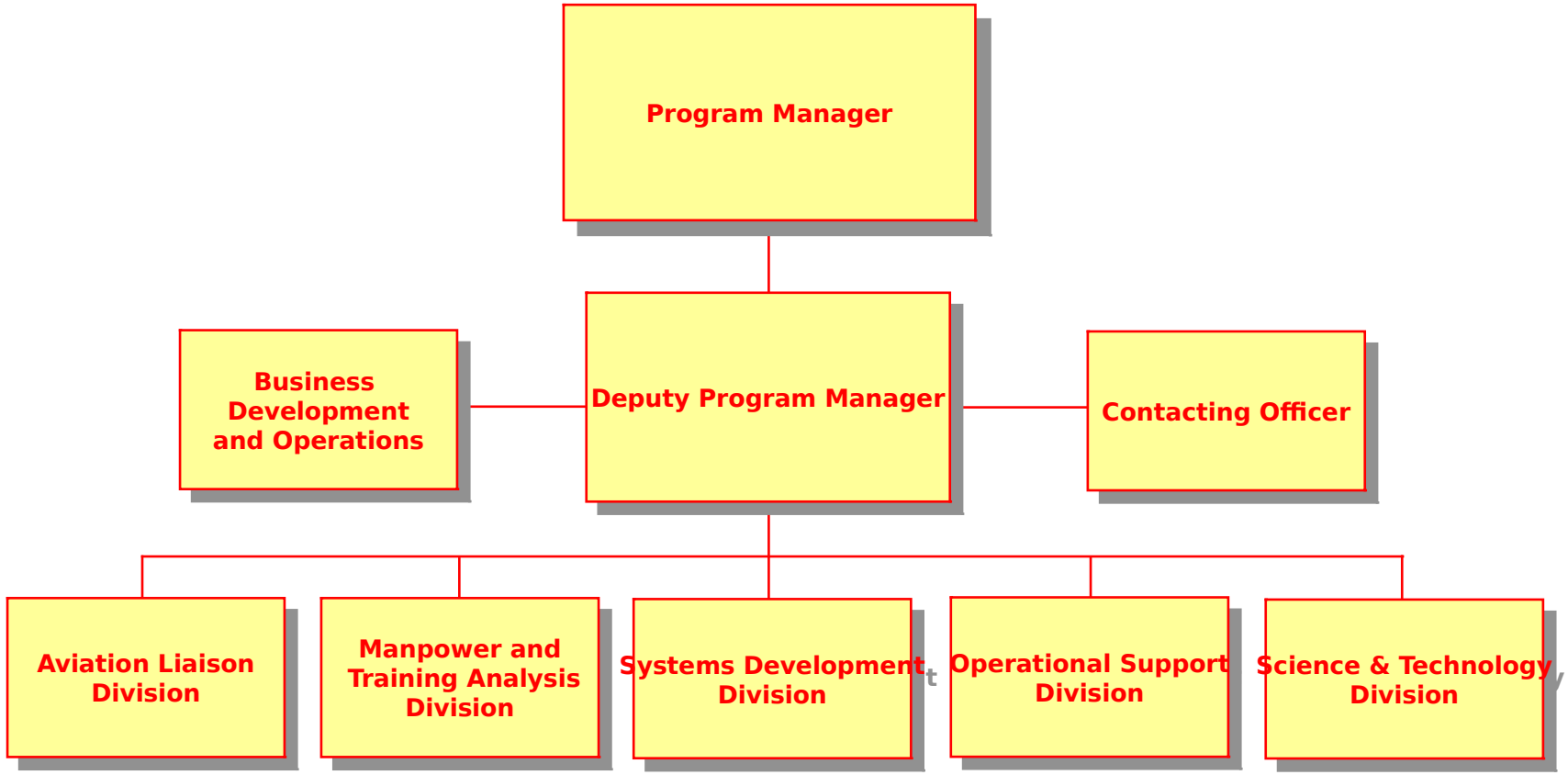
Marine Corps Systems Command (MCSC)



Program Manager for Training Systems (PM TRASYS)

Mr. Dan Torgler
Deputy Program Manager
pmtrasys.mcsc@navy.mil
(407) 381 - 8762

Organization



pmtrasys.mcsc@navy.mil

(407) 381- 8762

Acquisition Planning

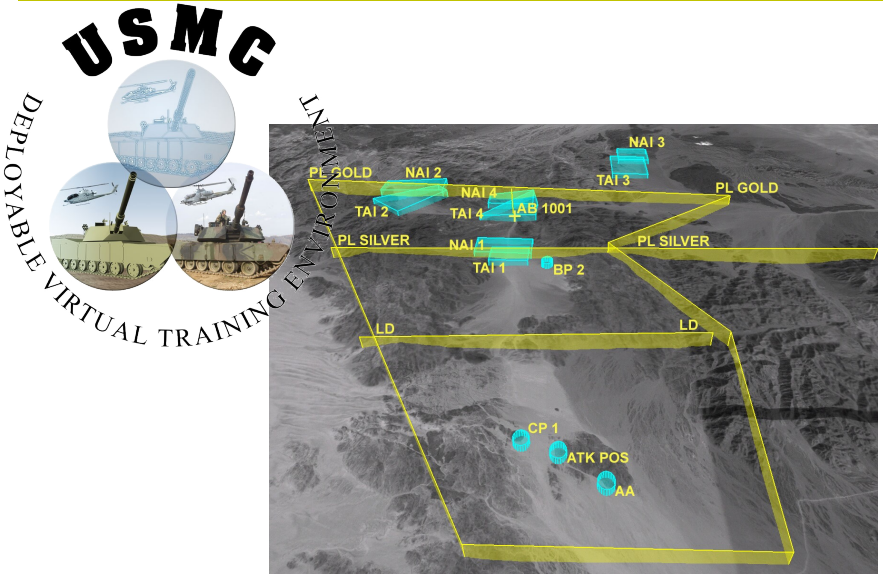
- Systems Development Division
  - Deployable Virtual Training Environment (DVTE)
  - Expeditionary Fighting Vehicle (EFV) Automated Electronic Classrooms (AECs)
  - Indoor Simulated Marksmanship Trainer - Enhanced (ISMT - E)
  - Multiple integrated Laser Engagement System - 2000 (MILES - 2000)
  - Range Modernization and Transformation (RM/T)
- Operational Support Division
  - Indoor Simulated Marksmanship Trainer - Enhanced (ISMT - E)
  - Minor Training Devices
  - Multiple Integrated Laser Engagement System - 2000 (MILES - 2000)
- Science & Technology Division
  - Tactical Decision Making Simulation Technology
  - Synthetic Environment Technology
  - Instrumentation and Situation Awareness Technology
  - Augmented Cognition/Enhanced Human Performance Technology
- Foreign Comparative Test (FCT) Program
- Commercial Enterprise Omnibus Support Services (CEOss)
- Marine Corps Systems Command Industry Day – Modern Day Marine Expo

Systems Development Division

pmtrasys.mcsc@navy.mil

(407) 381- 8762

Deployable Virtual Training Environment (DVTE)



Description: The Deployable Virtual Training Environment (DVTE) provides skill sustainment training (vice entry-level training) for deployed Marines (individuals, teams, and units). The system allows a training audience to practice and hone their application of direct and indirect combined arms fire support in conjunction with maneuvering ground forces and a credible virtual enemy threat. DVTE will be interoperable with other Marine Corps Live, Virtual, and Constructive ground and air training systems, and is the H/W platform for multiple TDS's.

Schedule

*PDSS - RFP	4Q FY04
Contract Award	1Q FY05

Anticipated Small Business set-aside

* Post Deployment System Support

Funding

($000)

	FY05	FY06	FY07	FY08	FY09
PMC	0	0	1000	2450	0
OMMC	1600	1600	1600	1600	1600
Total	1600	1600	2600	4050	1600

Expeditionary Fighting Vehicle (EFV) Automated Electronic Classrooms (AECs)

Objective:

Eight (8) classrooms will be procured to support EFV formal Schoolhouse training. The eight AECs will be installed in the new Assault Amphibian School Battalion facility to be completed at Camp Pendleton, CA. Installation for the classrooms is planned for the first quarter of FY06.

Capabilities:

Each AEC will contain the hardware, software, furniture, Instructor Operator Station, peripherals and cabling to support the delivery management of EFV Curriculum and interactive multi-media instruction.

There will be four 40 seat classrooms and one 25 seat classroom.

Schedule:

TASKS	FY05	FY06
AECs ACQUISITION	▲——▲	
COMPLETION OF AAS FACILITIES	▲	
AECs DELIVERIES		▲
AECs ACCEPTANCE TESTING		▲

Indoor Simulated Marksmanship Trainer - Enhanced (ISMT- E)

Description: A competitive contract is planned in FY05 for 170 new portable reconfigurable systems to Marine Corps Security Guard (MSG) detachments. These systems will provide interactive weapons training to enhance marksmanship, weapons employment, and tactical decision making for a variety of small arms. The system will consist of untethered weapons instrumented to enable engagement in various video and computer generated scenarios relevant to the various real world locations.

Schedule

MSG RFP	Aug 2004
Contract Award	Dec 2004

Funding

($000)

	FY05	FY06	FY07	FY08	FY09
PMC	5854	5854	0	0	0
Total	5854	5854	0	0	0

Multiple Integrated Laser Engagement System – 2000 (MILES – 2000)

Description: MILES 2000 is a joint interest program between the US Marine Corps and the US Army. The FY05 contract will be to purchase Small Arms Transmitters (SATs) for weapons and vehicles. SATs will be Class 1 eye safe lasers for use in MOUT environments.

Schedule

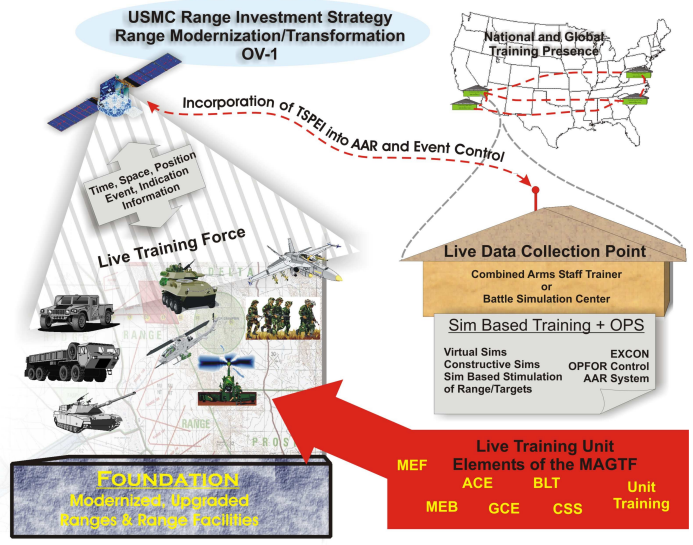
RFP	Jul 2004
Contract Award	Oct 2004

Funding

($000)

	FY05	FY06	FY07	FY08	FY09
PMC	2156	1508	2247	1141	667
Total	2156	1508	2247	1141	667

Range Modernization and Transformation (RM/T)



Description: RM/T modernizes USMC ranges to provide realistic OPFOR effects and ground truth training feedback and AAR. The RM/T architecture provides overarching integration of Live, Virtual, and Constructive (L-V-C) training environments and connectivity for JNTC participation. A system of systems, range transformation is achieved by interfacing existing commercial and emerging L-V-C training systems (Battle Effect Simulation (BES), MILES 2000, Position Location Information (PLI), DVTE, JCATS, MTWS, CACCTUS) to leverage their stand alone training functionalities for maximum training effectiveness.

Schedule

Target RFP	3Q FY04
BES RFP	
3Q FY04	
Mobile MOUT RFP	
3Q FY04	
MILES/PLI RFP	3Q FY04

Funding

($000)

	FY04	FY05	FY06	FY07	FY08	FY09
PMC	31000	0	0	0	0	0
OMMC	1600			0	0	0
	0	0	0			
Total	32600			0	0	

Operational Support Division

pmtrasys.mcsc@navy.mil

(407) 381- 8762

Indoor Simulated Marksmanship Trainer – Enhanced (ISMT-E)

Description: The ISMT-E is an interactive weapons simulator that provides enhanced marksmanship, weapons employment, and tactical decision making training for a variety of small arms. It consists of demilitarized infantry weapons that are instrumented with lasers to enable engagement in various video and computer generated scenarios. A competitive contract is planned in FY05 for Contractor Logistic Support (CLS) for all fielded ISMT/ISMT(E) systems (currently over 400 systems – CONUS, Hawaii, Okinawa, will include new MSG systems (FY06))

Schedule

CLS RFP 2005	Jan
Contract Award 2005	Apr

Funding

($000)

	FY05	FY06	FY07	FY08	FY09
OMMC 2510	2572	2288	2360	2434	
Total 2510	2572	2288	2360	2434	

Minor Training Devices

Description: This program encompasses the yearly procurement of low density, minor ground training equipment. These devices, such as rubber rifles/pistols, training dummies, rubber bayonets, PITS, smoke generator, and models, enhance basic occupational and combat skills across the wide spectrum of tactics, firearms and weapon proficiency.

Schedule

Annual schedules are developed based upon yearly priority of need.

Funding

($000)

	FY05	FY06	FY07	FY08	FY09
PMC	1090	913	929	962	998
OMMC	337	350	364	379	394
Total	1427	1263	1293	1371	1392

Multiple Integrated Laser Engagement System – 2000 (MILES – 2000)

Description: MILES 2000 is a joint interest program between the US Marine Corps and the US Army. It provides a family of low power, eye safe lasers which simulates the direct fire characteristics of infantry assault, armor, anti-armor mechanized weapons system and provides the gunner with hit or miss determination. MILES 2000 is designed to be used by the MAGTF as a force-on-force engagement simulation training system.

Schedule

RFP	Jul 2004
Contract Award	Oct 2004

Funding

($000)

	FY05	FY06	FY07	FY08	FY09
OMMC	3540	3800	4020	4240	4660
Total	3540	3800	4020	4240	4660

Science & Technology Division

pmtrasys.mcsc@navy.mil

(407) 381- 8762

6.2 Tactical Decision Making Technology

Task Description:

- Develop and validate technologies to support a family of low cat PC simulations that provide realistic scenario based tactical decision making training for individual Marines, small units and MAGTF organizations.

Pay Off:

- Enable warfighting experimentation and development of concepts and tactics for use by GCE, CSSE, ACE and CE of MAGTF
- Multi-echelon, multi-player, network compatible training systems
- Provides Enhancement to formal instruction
- CD and PC based – accessible anytime, anywhere

Technical Approach:

- Develop warfighting, staff training, ACE and CE training requirements and gaming concepts
- Perform cognitive task analysis (CTA)
- Work closely with SME and formal schools to ensure development of realistic and decision centered TDSs
- Adapt web based gaming to meet training objectives
- Focus on distributed environment, CGF, simulation engines, terrain/visualization databases, mission editors and AAR technologies
- Perform Technology feasibility assessment
- Develop conceptual model and prototype

Schedule: Tactical Decision Making Technology

TASKS	FY02	FY03	FY04	FY05	FY06
ATFP TDS DEVEL					
ACE TDS DEVEL					
CE TDS DEVEL					
CONDUCT EVALUATIONS					
TRANSITION TO 6.3 PROGRAM					

Transition: USMC Family of TDSs (6.3)

6.3 USMC Family of Tactical Decision Simulations (TDSs)

TRAINING FOR MARINES, ANYTIME, ANYWHERE!!

Technical Approach:

- Develop warfighting, staff training, ACE and CE training requirements and gaming concepts
- Work closely with SME and formal schools to ensure development of realistic and decision centered TDSs
- Demonstrate and test the technology
- Integrate technology into T&E curriculum
- Perform Training Effectivness Evaluations (TEE)

Technology Development Agent: PM TRASYS

Task Description:

- Develop a family of low cost PC simulations that provide tactically relevant scenario based tactical decision making training for individual Marines, small units and MAGTF Organizations. "MTWS" on a PC.

Pay Off:

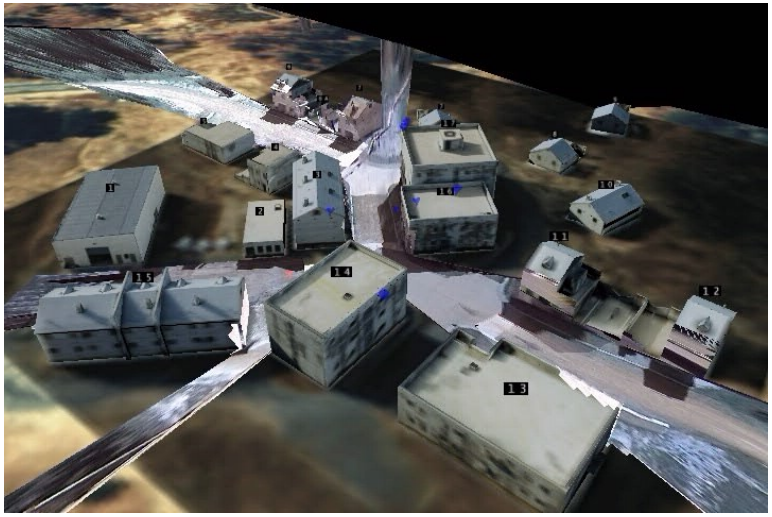
- Enable warfighting experimentation and development of concepts and tactics for use by GCE, CSSE, ACE and CE of MAGTF
- Multi-echelon, multi-player, network compatible training systems
- Provides Enhancement to formal instruction
- CD and PC based – accessible anytime, anywhere

Schedule: USMC Family of TDSs

TASKS	FY02	FY03	FY04	FY05	FY06
MAGTF-21 GCE TDS TEST	▲		▲		
CSSE TDS INT&TEST		▲		▲	
ATFP TDS INT&TEST		▲			▲
ACE/CE TDS INT & TEST				▲	
CONDUCT EVALUATIONS	▲				
TRANSITION TO USERS			◆		◆

Transition: MCI, MCU (EWS, TBS), Engr School, DVTE TDMSS

6.2 Synthetic Environment Technology



Task Description:

- Develop and validate technologies to support rapid and automated 3D scene generation for capturing and converting real world terrain and cultural features into 3D images suitable for immediate training applications to include Close Quarters Battle (CQB) and Military Operations Urban Terrain (MOUT)

Pay Off:

- Near real-time common database generation capability for virtual training systems
- Automated recognition of terrain and cultural features with pixel reduction
- Live video integrated w/ synthetic environment for AAR
- Live virtual integration for synthetic OPFOR

Technical Approach:

- Perform technology feasibility assessment
- Perform concept definition
- Develop and demonstrate the video modeling engine
- Exploit oblique imagery technology
- Develop automated recognition of terrain and cultural features
- Integrate live video with 3D model for AAR
- Develop processes and tools for MAGTF common database production
- Develop live virtual environment integration
- Perform early development testing

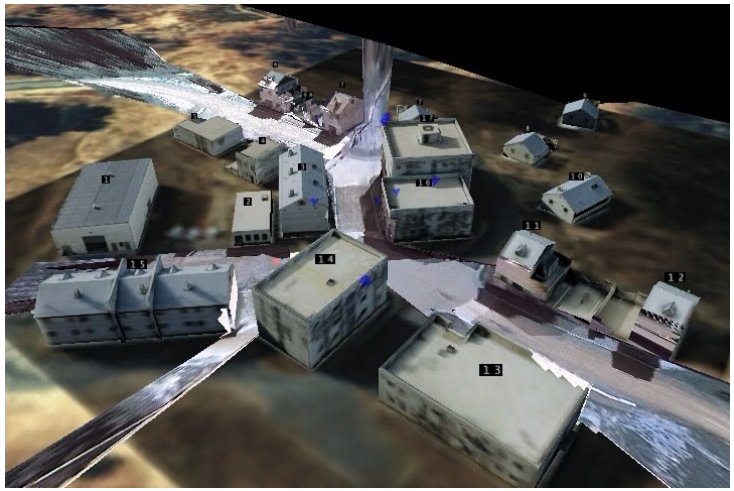
Schedule: Synthetic Environment

TASKS	FY02	FY03	FY04	FY05	FY06
RF & VIDEO TRACKING					
COMMON DATABASE GEN					
LIVE-VIRTUAL INTEG					
CONDUCT EVALUATIONS					
TRANSITION TO 6.3 PROGRAM					

Transition: Transition to 6.3 Synthetic Environment

Technology Development Agent: PM

6.3 Synthetic Environments



Task Description:

- Develop a prototype capability of rapid and automated 3D scene generation for capturing and converting real world terrain and cultural features into 3D images suitable for immediate training applications to include Close Quarters Battle (CQB) and Military Operations Urban Terrain (MOUT)

Pay Off:

- Near real-time common database generation capability for virtual training systems
- Advance video modeling algorithms
- Automated recognition of terrain and cultural features with pixel reduction
- Live video integrated w/ synthetic environment for AAR

Technical Approach:

- Perform concept definition
- Develop and demonstrate the video modeling engine
- Exploit oblique imagery technology
- Develop automated recognition of terrain and cultural features
- Integrate live video with 3D model for AAR
- Develop processes and tools for MAGTF common database production
- Perform early development testing
- Transition into VIRTE program

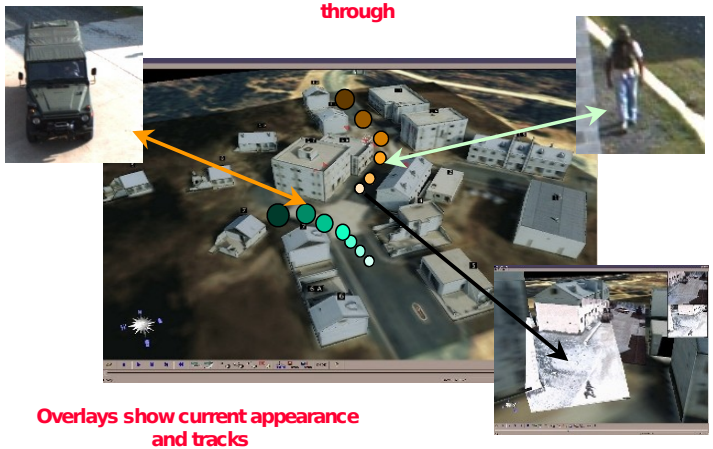
Scheduled Synthetic Environment

TASKS	FY02	FY03	FY04	FY05	FY06
LIVE VIDEO DEMO &TEST	▲	———	———	▲	
SYN ENV AUTO DEMO & TEST		▲	———	———	▲
COMMON DB DEMO & TEST			▲	———	▲
TRANSITION TO USERS				◆	◆

Technology Development Agent: PM TRACYS

TRANSITION: CM FNC, LCPP FNC, DVTE

6.3 Training Instrumentation and Situational Awareness (SA) Technology



Task Description:

- Develop prototypes to demonstrate an affordable capability that apples instrumentation and situational awareness technologies to provide enhanced, deployable live-training and combat situational awareness at all levels of MAGTF.

Pay Off:

- Enhanced situational awareness for individual, small unit and combined arms live simulations
- Portable non-virtual MOUT and CQB training capability for supporting improved situational awareness at all levels.

Technical Approach:

- Exploit instrumentation for PLI in open and restricted terrain
- Exploit high speed and wireless network technology
- Exploit ad hoc networking and intelligent sensor nodes
- Develop prototypes
- Perform developmental tests and demos to prove feasibility

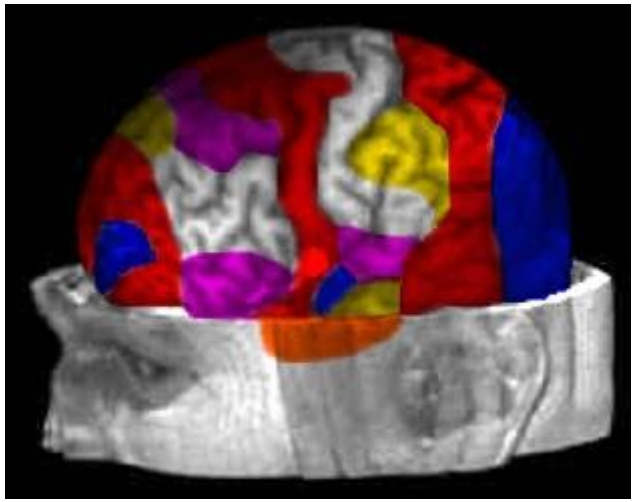
Technology Development Agent: PM TRASYS

Schedule: Training Instrumentation & SA Technology

TASKS	FY03	FY04	FY05	FY06	FY07
RF -VIDEO TRK FOR PLI	DEMO & TEST				
AD HOC NETWORKS	DEMO & TEST				
CONDUCT EVALUATIONS					
TRANSITION TO 6.3 PROGRAM					

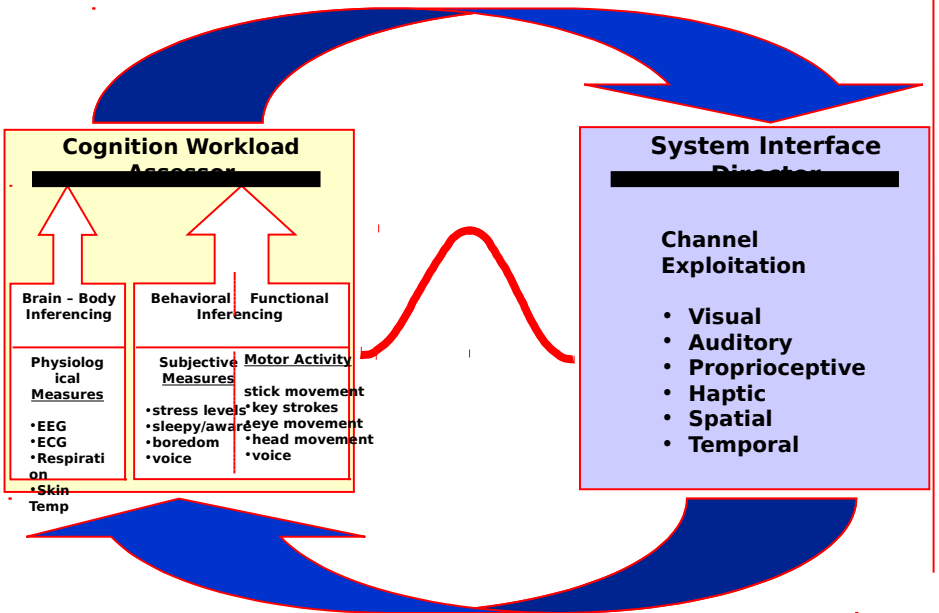
Transition: DVTE, RIS

6.2 Augmented Cognition/Enhanced Human Performance Technology



Objective:

- Demonstrate novel brain/machine symbiosis to augment human cognition and performance
- Asymmetric thinking, Intuitive decision making, dominant speed of pattern recognition, intellectual maneuver



Schedule: Augmented Cognition Technology

TASKS	FY04	FY05	FY06	FY07	FY08
TECH FEASABILITY ASSES					
TECHNOLOGY DEVEL					
CONDUCT EVALUATIONS					

Transition: CM FNC, LCPP FNC, DVTE

Science & Technology
Broad Area Announcement (BAA)

- **Broad Area Announcement (BAA) Solicitation Number M67854-04-R-8000**

- **This BAA is intended to cover, in general, all R&D areas of interest to NAVAIR Orlando and its customers relating to simulation and training technology. PM TRASYS has comprehensive simulation training system responsibilities ranging from research and technology-based development through system acquisition and life cycle support. The requirement for R&D conducted under this BAA is to explore unique training technologies incorporating innovative behavioral and engineering technologies, which are needed for more effective and less expensive training systems. Specific BAA research topics are identified in the BAA.**

- **Link to BAA: http://www.marcorsyscom.usmc.mil/sites/pmtrasys/BAA.asp**

- **Funding for FY05 is $4M for all S&T Thrusts**

Foreign Comparative Test (FCT) Program

- **The Office of the Secretary of Defense (OSD) sponsored Foreign Comparative Test (FCT) Program supports the warfighter by leveraging non-developmental items (NDI) for allied and friendly nations to satisfy U.S. Defense requirements, thereby accelerating the U.S. acquisition process and lowering development costs.**

- **Each year the Military Services and U.S. Special Operations Command nomiate candidate projects to OSD for funding considerations. Proposals are evaluated to ensure that:**
  - **1.) Proposed NDI addresses valid DoD requirements**
  - **2.) A thorough market survey was conducted to identify all potential candidates**
  - **3.) The sponsoring organization has developed a viable acquisition strategy to transition the item to the U.S. warfighter.**

- **Link to OSD Comparative Testing Office website http://www.acq.osd.mil/cto/index.htm**

Technologies of Interest

- Military Operation Urban Terrain (MOUT) Instrumentation
- Operational Position Location Information (PLI), Blue Force Tracking (BFT)
- Open standards Distributed Virtual Simulation, Distributed Mission Operations/Training (DMO/T)
- Semi-Autonomous Forces (SAF) integration
- Multi-Level Security
- Intelligent tutor/agent After Action Review (AAR)
- Automated Live-Virtual-Constructive interface with Command & Control (C2) Systems (C2PC, FBCB2 and AFATDS)
- Rapid Terrain and Features Database Generation

Commercial Enterprise Omnibus Support Services (CEOss)

- The Marine Corps System Command (MCSC) has established the Commercial Enterprise Omnibus support services (CEOss) program, a $3B indefinite-delivery/indefinite quantity (IDIQ) business model.

- CEOss is provided under four performance areas: Engineering & Scientific Domain, Acquisition, Logistics & Admin Domain, Specialty Engineering Domain and Business & Analytical Domain

- The CEOss model relies exclusively on electronic procurement practices via their eP^2 technology. This technology enables a "virtually paperless" process for soliciting, evaluating, awarding and administering task orders generated under CEOss.

- 30 Apr 04 FEDBIZOPPS Open Season Announcement, Closes 14 Jun 04.
  Announcement Link:
  http://www1.eps.gov/spg/DON/USMC/M67854/Reference%2DNumber%2DCEOSS%2DOS%2D05/SynopsisR.html

- For additional information go to http://www.marcorsyscom.usmc.mil and select “ACSS” or contact Mark Hoyland, Director ACSS at ACSS@mcsc.usmc.mil

Marine Corps Systems Command Industry Day – Modern Day Marine Expo

- **PM TRASYS will be providing a brief to Industry at the Marine Corps Systems Command (MCSC) Industry Day scheduled for 13 Sep 04 in Arlington, VA.**

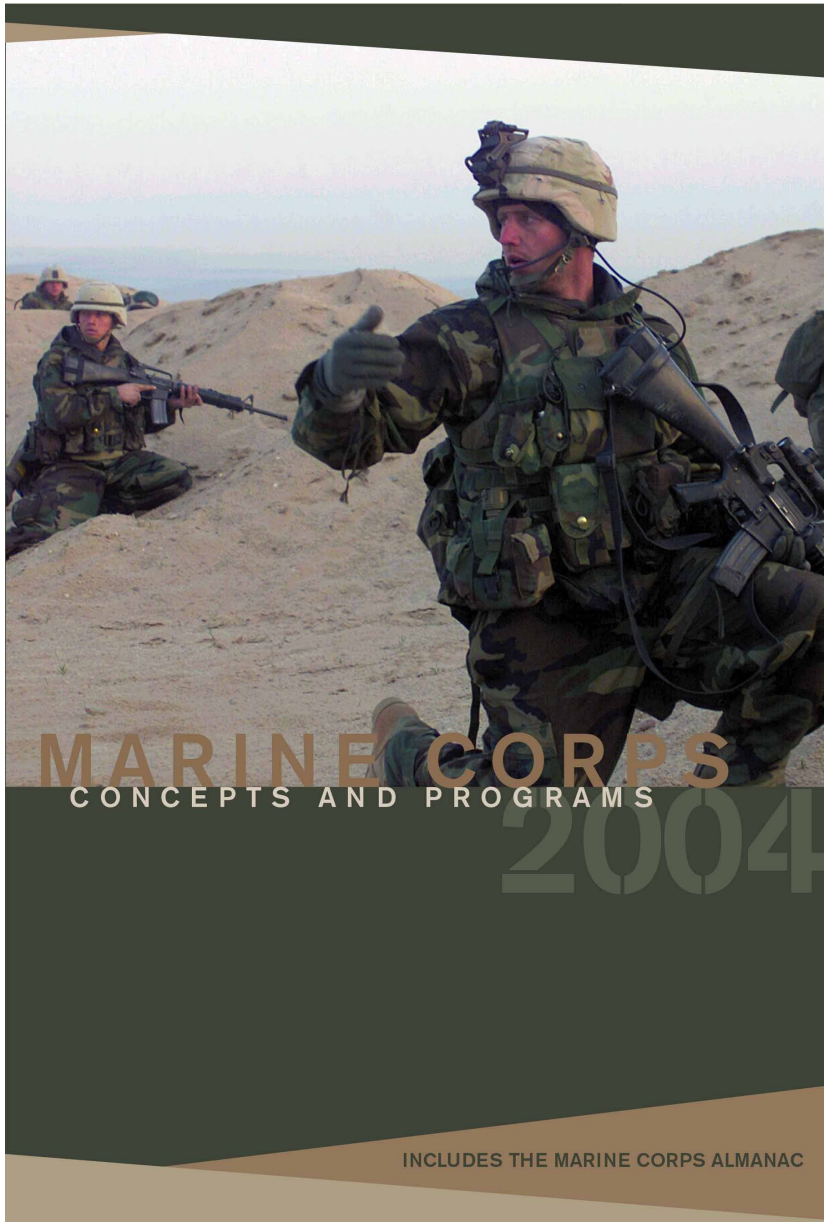
- **Each MCSC Product Group (PG) and Independent Program Managers (PM) will provide Advanced Planning Briefings to Industry.**

- **During Modern Day Marine 14-16 Sep 04 in Quantico, VA interested contractors can meet with PGs and PMs to have follow on discussion about upcoming requirements.**

- **When closer, additional information on Industry Day and Modern Day Marine will be posted to the Marine Corps Systems Command Website: http://www.marcorsyscom.usmc.mil**

PM TRAINING SYSTEMS

MARCORSYSCOM



http://hqinet001.hqmc.usmc.mil/p&r/concepts/2004/toc1.htm

pmtrasys.mcsc@navy.mil

(407) 381- 8762

Marine Corps Systems Command
Program Manager for Training Systems
Products & Services Information Handbook

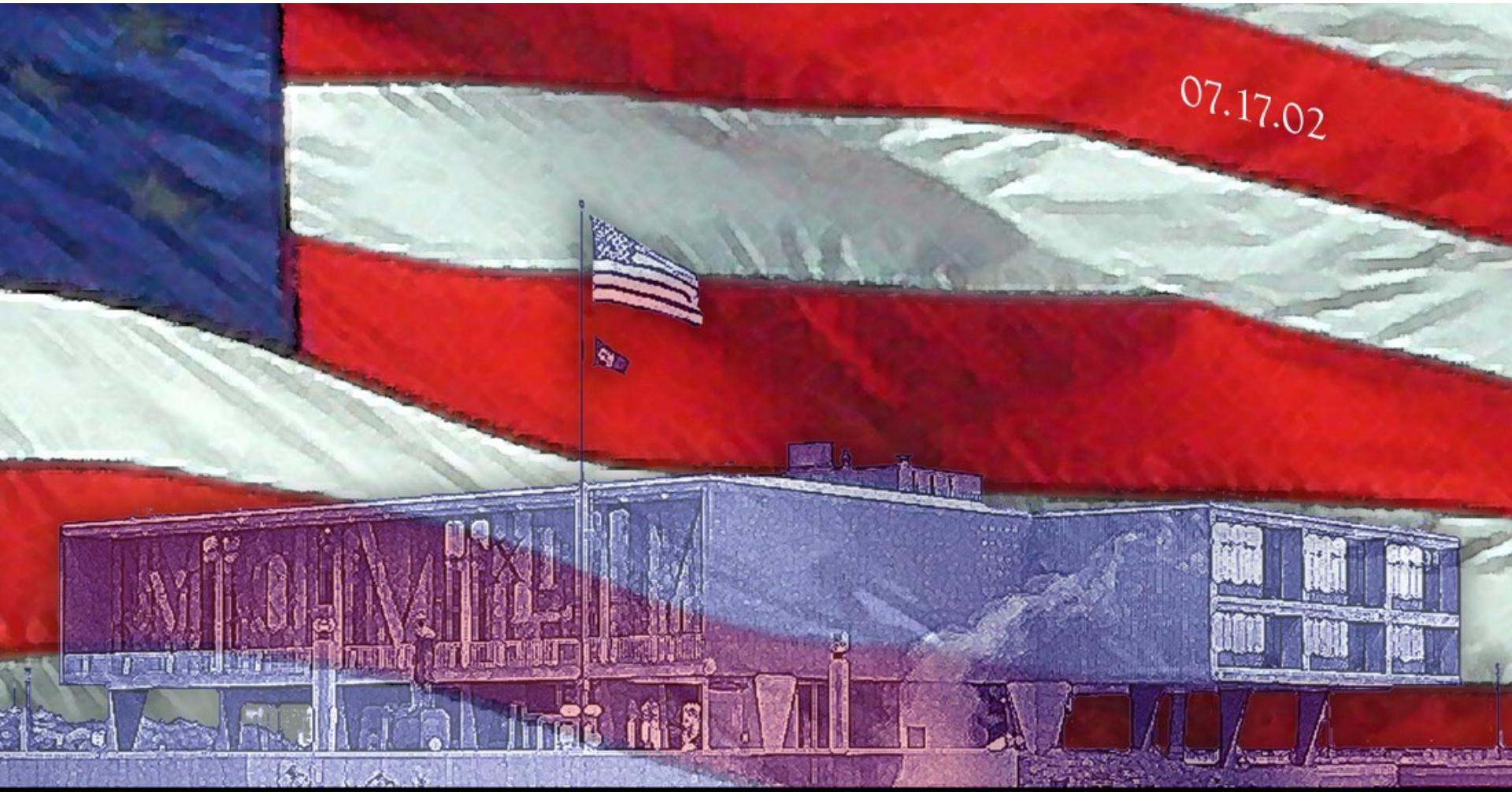
PM TRAINING SYSTEMS
MARCORSYSCOM

http://www.marcorsyscom.usmc.mil

Select "TRASYS"

pmtrasys.mcsc@navy.mil

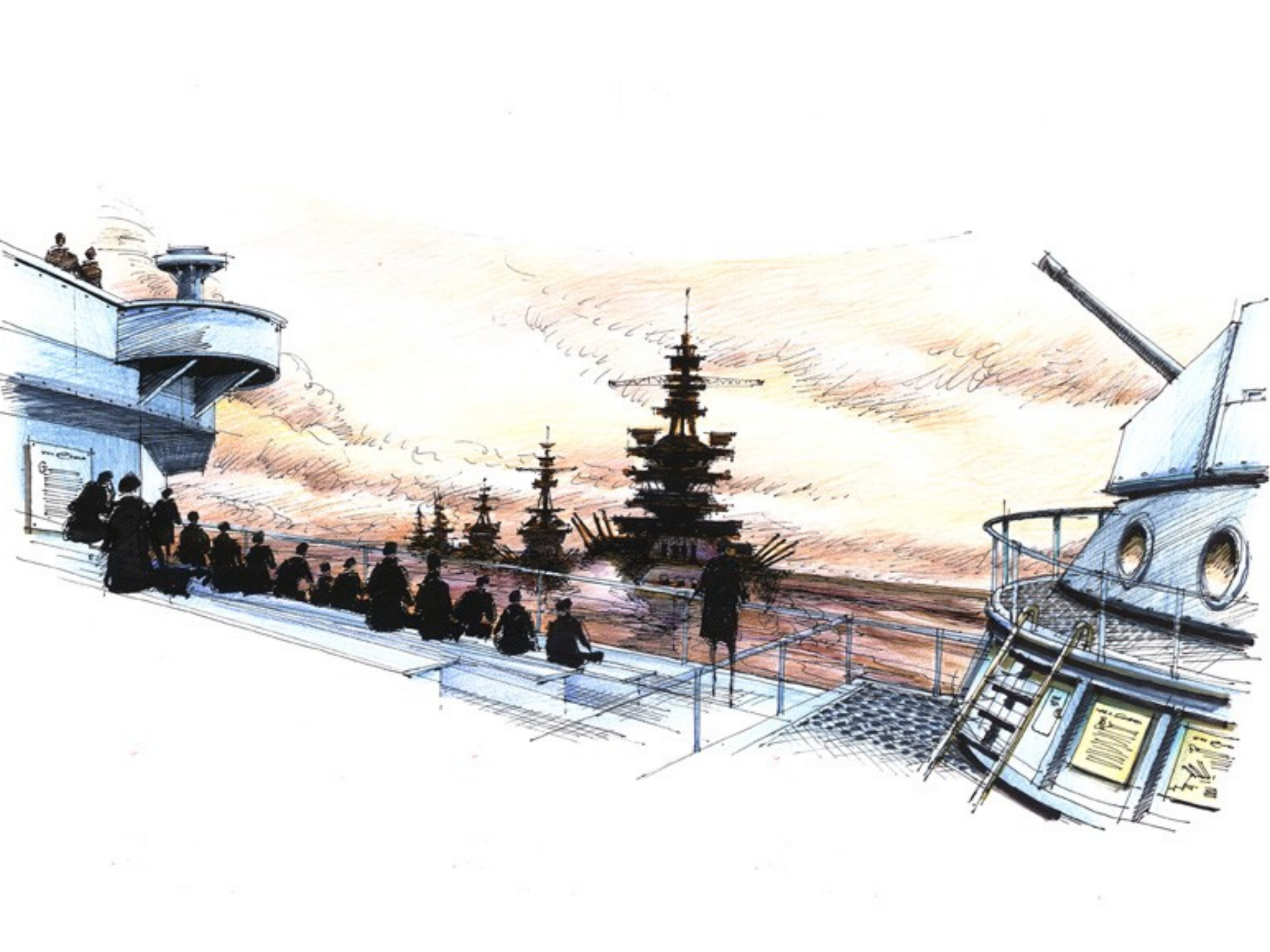
(407) 381- 8762

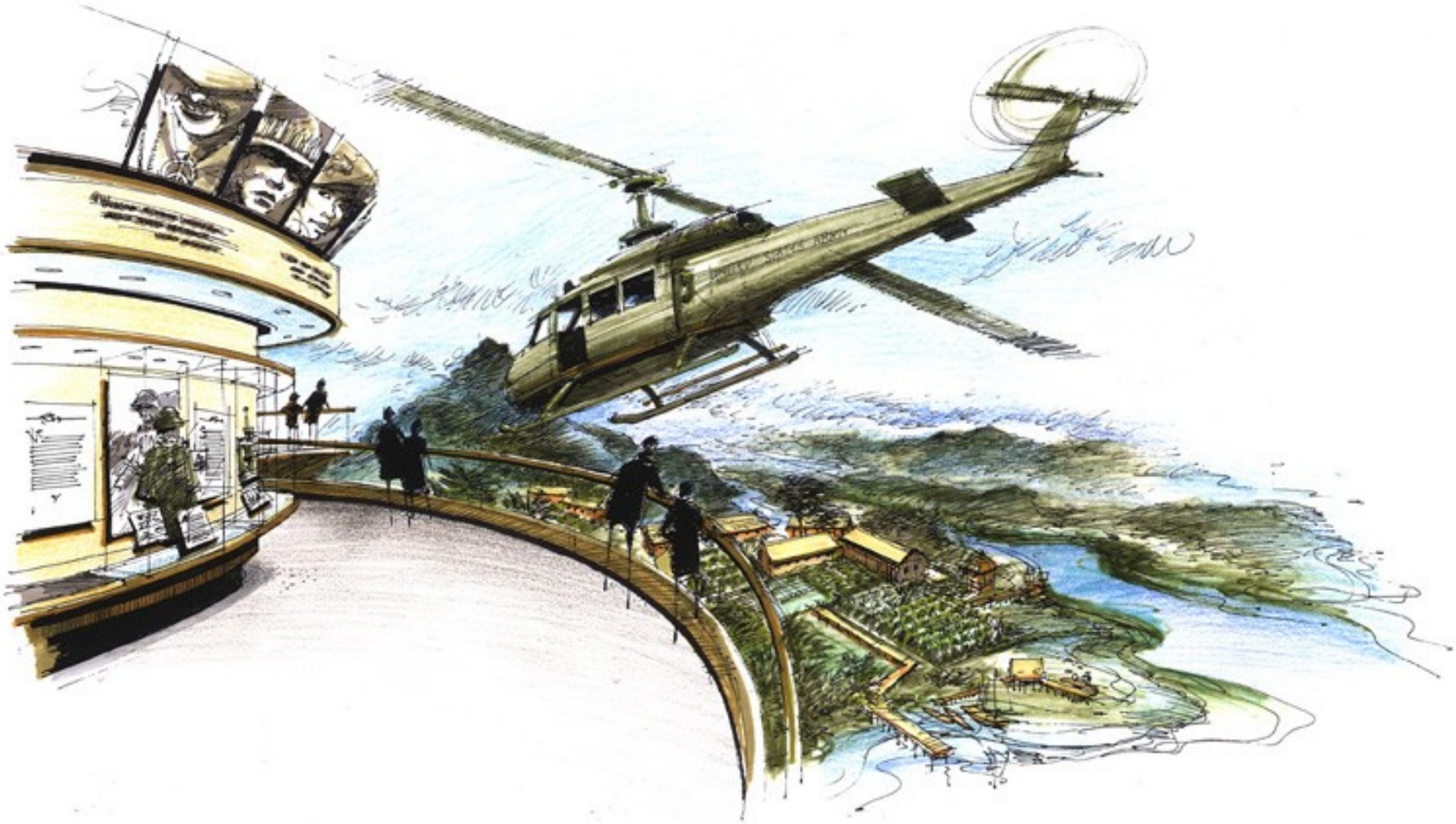


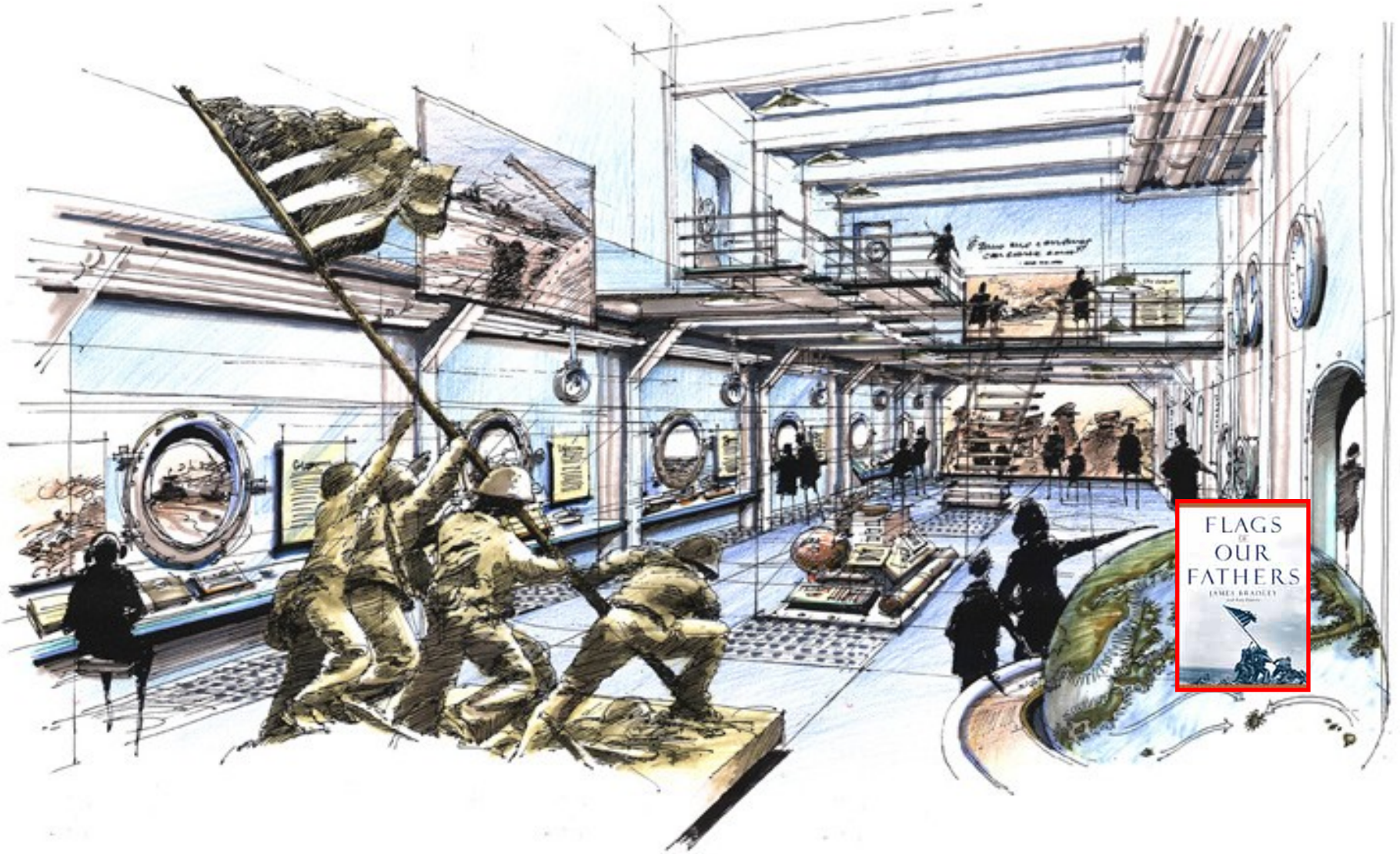
Milwaukee County War Memorial

America's Freedom Center
at the Milwaukee County War Memorial

Eppstein Uhen Architects






FLAGS
OF
OUR
FATHERS
JAMES BRADLEY

Questions?

pmtrasys.mcsc@navy.mil

(407) 381- 8762